CLAIMS

WHAT IS CLAIMED IS:

1. A method of assessing the expression of mRNA for T cell receptor variable subunit α, comprising the steps of:

extracting mRNA from T cells;

performing a polymerase chain reaction using a reaction mixture that includes a nucleotide sequence selected from the group consisting of SEQ ID NOs: 1 through 32 and said mRNA; and

measuring the product of said polymerase chain reaction.

2. The method of Claim 1, wherein said measuring occurs by gel electrophoresis or fluorescent detection.

3. The method of Claim 1, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.

4. The method of Claim 3, wherein a progress of said reverse transcription polymerase chain reaction is assessed in real time.

5. The method of Claim 1, wherein said reaction mixture further includes deoxynucleotide triphosphates.

6. The method of Claim 6, wherein said reaction mixture further includes SEQ ID No. 56.

7. A method of assessing the expression of mRNA for T cell receptor variable subunit β, comprising the steps of:

extracting mRNA from T cells;

performing a polymerase chain reaction using a reaction mixture that includes a nucleotide sequence selected from the group consisting of SEQ ID NOs: 33 through 55 and said mRNA; and

measuring the product of said polymerase chain reaction.

8. The method of Claim 7, wherein said measuring occurs by gel electrophoresis or fluorescent detection.

9. The method of Claim 7, wherein said polymerase chain reaction is a reverse transcription polymerase chain reaction.

10. The method of Claim 9, wherein the progress of said reverse transcription polymerase chain reaction is assessed in real time.

11. The method of Claim 7, wherein said reaction mixture further includes deoxynucleotide triphosphates.

12. The method of Claim 11, wherein said reaction mixture further includes SEQ ID No. 57.

13. A kit for assessing the expression of T cell receptor variable subunit α in a patient, said kit comprising SEQ ID Nos: 1-32, an enzyme capable of performing a polymerase chain

reaction, and buffer solutions capable of supporting said polymerase chain reaction.

14. The kit of Claim 13, wherein said kit further comprises deoxynucleotide triphosphates.

15. A kit for assessing the expression of T cell receptor variable subunit β in a patient, said kit comprising SEQ ID Nos: 33-55, an enzyme capable of performing a polymerase chain reaction, and buffer solutions capable of supporting said polymerase chain reaction.

16. The kit of Claim 15, wherein said kit further comprises deoxynucleotide triphosphates.

17. A gene chip for the measurement of the expression of T cell receptor variable subunit α genes, said gene chip comprising, SEQ ID Nos: 1 through 32.

18. A gene chip for the measurement of the expression of T cell receptor variable subunit β genes, said gene chip comprising, SEQ ID Nos: 33 through 55.